

Nine Eagles TM Distributed by Trobbe

Optional:
Optional:
Optional: **Operating Instructions GALAXY VISITOR 2** RTF FTR 2.4 GHz

No. NE2528FTR





FUTABA Transmitter Ready, abbreviated to FTR, applies to selected models from the Nine Eagles range. These models' transmitter and receiver work with the FUTABA S-FHSS code, which means that they can also be controlled by FUTABA transmitters which can be operated in S-FHSS mode.

At present these are the following transmitters: T6J-R2006GS 2.4 GHz FHSS, No. F4100
T-8J - R2008SB 2.4 GHz FHSS/S-FHSS, No. F4108
T18MZ-R7008SB 2.4 GHz FASSTest M2, No. F8073
T18MZ-R7008SB 2.4 GHz FASSTest M1, No. F8073M1
T-14SG-R7008SB 2.4 GHz FASSTest M2, No. F8075
T14SG-R7008SB 2.4 GHz FASSTest, No. F8079
FX-32-R7008 2.4 GHz FASSTest, No. F8078





Explanation of specialist terms:

Climb and descent ("Collective pitch / throttle"): this controls the model's climb and descent.

Yaw: The model's movement around the vertical axis. The model's nose turns to right or left.

Pitch-axis: The model's movement around the lateral axis: forward or reverse flight.

Roll-axis: The model's movement around the longitudinal axis: sideways movement to right or left.

Dual Rate: Switchable travel reduction for control movements.

Binding: Creating the radio link between transmitter and receiver.

Update V02/01/14 of these instructions with the kind support of Peter Wellmann / RC-Heli-Action.

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Please be sure to observe the safety notes regarding the safe handling of Lithium-lon-Polymer batteries on page 9.

Special features of the GALAXY VISITOR 2 RTF FTR

Two flight modes are available:

- · Conventional flying and intelligent flying
- There is a push-button on the transmitter for toggling between the modes
- The "Headless Flight Mode" in intelligent flight mode makes it particularly easy for beginners to master the quadrocopter.
- An "Auto-Return" function ensures that the quadrocopter comes straight back to the pilot.
- · Brake function. The copter slows down automatically when the pilot releases the sticks.

Kev features:

- · Anti-collision guard simply by switching the acceleration sensor on and off.
- · LEDs of different colour make it simple to detect the model's attitude.
- · On-board micro digital camera available as an option for video and still pictures.
- · Interchangeable housing in the colours black / white, black and grey. Tops and bottoms of different colour can be combined.

Model description

The GALAXY VISITOR 2 is a 2.4 GHz mini-quadrocopter of the latest generation.

The highly developed nine-axis gyro and stabilisation system is the key to the model's extremely simple method of control and accurate response. The GALAXY VISITOR 2's simple control system and good inherent stability make it an excellent choice for the beginner. This quadrocopter's agility level is user-variable, and this ensures that flying the GALAXY VISITOR 2 is never boring even for advanced pilots. The model can also cope well with gentle breezes when flown outdoors. The GALAXY VISITOR 2 combines many advantages in one model, including small size, low weight and safe operation.



Be sure to read these Safety Notes before you assemble your model. Always keep to the procedures and settings recommended in the instructions.

If you are operating a radio-controlled model aircraft, helicopter, car or boat for the first time, we recommend that you enlist an experienced modeller to help you.

Safety Notes

Radio-controlled models are not toys in the usual sense of the term. Young persons under fourteen years should only be allowed to operate them under the supervision of an adult.

Building and operating these models requires technical expertise, manual skills, a careful attitude and safety-conscious behaviour.

Errors, negligence and omissions in building or flying these models can result in serious personal injury and damage to property.

Since the manufacturer and vendor are not in a position to check that your models are built and operated correctly, all we can do is bring these hazards expressly to your attention. We deny all further liability.



Helicopter rotors, and all moving parts generally, constitute a constant injury hazard. It is essential to avoid touching such parts.



Please bear in mind that motors and speed controllers may become hot when operating. It is essential to avoid touching such parts.



Do not stand close to the hazard area around rotating parts when an electric motor is connected to the flight battery.

You must also take care to keep all other objects away from moving or rotating parts.



Observe the instructions provided by the battery manufacturer.

Overcharged or incorrectly charged batteries may explode. Take care to maintain correct polarity.



Notes on the use of dry cells:

Do not attempt to recharge dry cells, do not open them, and do not incinerate them. Remove exhausted dry cells from the transmitter after use. Escaped electrolyte may ruin the transmitter.

Ensure the equipment is protected from dust, dirt and moisture contamination. Do not subject the system to excessive heat, cold or vibration.

Use the recommended charger only, and charge the batteries only for the prescribed period.

Check your equipment for damage at regular intervals, and replace defective components with genuine spare parts.

Do not re-use any devices which have been damaged in a crash or by water, even when they have dried out again.

Send the equipment to the robbe Service Department for checking, or replace the parts in question.

Crash or water damage can result in concealed defects which may lead to failure in subsequent use.

Use only those components and accessories which we specifically recommend.

Do not carry out modifications to the radio control system components apart from those described in the instructions.

Operating the model



Caution - injury hazard:

Please keep your model helicopter a safe distance away from you and others, including other small co-axial and single-rotor models. Never fly over spectators, other pilots or yourself. Always fly manoeuvres facing away from other pilots and spectators. Please note that model helicopters generally, and aerobatic types in particular, are subject to enormous flight loads, and that interference cannot be ruled out even when you are using the best possible radio control system components. Operating this type of model calls for a responsible attitude and all possible safety precautions to protect pilots and spectators.

- Never fly close to high-tension overhead cables or residential areas.
- Do not operate your model in the vicinity of canal locks or open waterways.
- Do not operate your model from public roads, motorways, paths and squares etc.; use authorised model flying sites only.
- · Never operate the model in stormy weather.

Insurance

Ground-based models are usually covered by standard personal third-party insurance policies. In order to fly model aircraft you will need to extend the cover of your existing policy, or take out specific insurance.

Check your insurance policy and take out new cover where necessary.

Liability exclusion:

robbe Modellsport is unable to ensure that you observe the assembly and operating instructions, or the conditions and methods used for installing, operating and maintaining the model components.

For this reason we accept no liability for loss, damage or costs which are due to the erroneous use and operation of our products, or are connected with such operation in any way.

Regardless of the legal argument employed, our obligation to pay compensation is limited to the invoice value of those robbe products directly involved in the event in which the damage occurred, unless otherwise prescribed by law. This does not apply if the company is deemed to have unlimited liability according to statutory regulation due to deliberate or gross negligence.



Set contents:

- 1x High-end mini-quadrocopter, factory-assembled and set up, ready to fly
- 1x LiPo battery, 3.7 V / 350 mAh with polarised connector
- 1x USB battery charger
- 1x 2.4 GHz four-channel transmitter, Mode 2 version (no provision for mode change)
- 4x AA-size dry cells
- 1x Four replacement rotors
- 1x Propeller guard rings
- 1x Screwdriver
- 1x Comprehensive operating and flying instructions

Dear customer.

Congratulations on choosing a factory-assembled model quadrocopter with video and photo function from our range. Many thanks for placing your trust in us.

The model can be completed and prepared for flight very quickly. Please read right through these instructions before attempting to fly the model for the first time, as this will make it much easier to operate the model safely.

All directions, such as "right-hand", are as seen from the tail of the model, looking forward.

Specification:

Main rotor ∅: approx. 56 mm Length: approx. 102 mm Width: approx. 102 mm Height: approx. 42 mm Flight battery: 3.7 V / 350 mAh LiPo All-up weight: approx. 44 g

RC functions:

Pitch-axis, roll, yaw, climb / descent Optional: video and still photo function

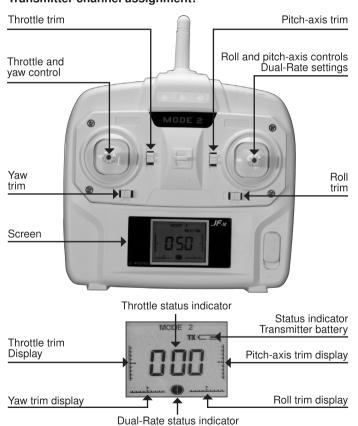
Optional accessories:

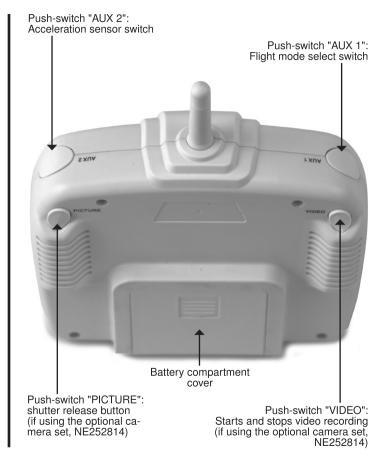
NE252814 Camera set

with SD card and card reader Camera resolution 1280 x 720 pixels

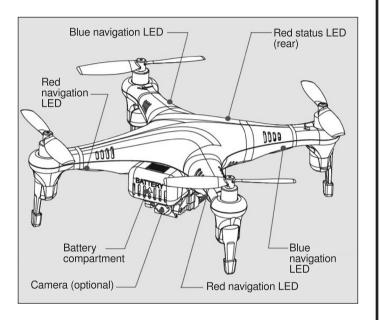
HD

Transmitter channel assignment:





Overview - GALAXY VISITOR 2



"Primary" and "expanded" control function setting

The transmitter offers the facility to adjust the sensitivity of the stick movements. We recommend "softer" reduced travels for beginners.

Open the transmitter battery compartment and insert the four AA cells* (check for correct polarity).

Procedure:



Switch the transmitter on, and press the right-hand stick inward.





Reduced control function

The "Dual-Rate status indicator" disc on the screen is reduced to half. Manoeuvrability 50%

Expanded control function:

Press the right-hand stick inward again. The full black disc now appears on the screen.

Manoeuvrability 100%

^{*} Please read the information regarding dry cells on page 5.



Safety Notes regarding LiPo batteries:

- · Do not place the battery in water or any other liquid.
- Never heat or incinerate the pack, or place it in a microwave oven.
- Avoid short-circuits, and never charge the battery with reversed polarity
- Do not subject the battery to pressure or shock loads, and never distort or throw the pack
- · Never solder directly to the battery.
- · Do not modify or open the battery.
- Batteries must only be charged with a suitable charger; never connect the battery directly to a mains power supply.
- · Never charge or discharge a battery in bright sunlight, or close to a heater or open fire.
- Do not use the battery in areas subject to high levels of static electricity.
- · Never leave the battery on charge unsupervised.
- Do not charge the battery in an inflammable location, or on an inflammable surface.
- Any of these errors can result in damage to the battery, explosion or fire.
- · Keep the battery away from children.
- If electrolyte should escape, do not expose it to fire, as the material is highly inflammable and may ignite.
- Do not allow fluid electrolyte to come into contact with eyes. If this should happen, flush with copious amounts of water and contact a doctor without delay.
- The fluid electrolyte can also be removed from clothing and other objects by rinsing with copious amounts of water.

LIABILITY EXCLUSION

Since robbe Modellsport is not in a position to monitor the handling of these batteries, we expressly deny all liability and guarantee claims where the batteries have been incorrectly charged, discharged or handled.

Flight preparations

1. Inserting the dry cells in the transmitter

Open the battery compartment on the rear of the transmitter, and insert four AA cells; take care to maintain correct polarity. Close the battery compartment again.

Charging the flight battery

Plug the flight battery into the USB charger. Take care to maintain correct polarity.





Connect the battery charger to a USB socket on your computer. The battery is on charge when the charger LED glows constantly. The charge process is complete when the red LED starts to flash slowly; the battery is then full. If the LED flashes at a high rate, an error has occurred. If this should happen, repeat the procedure. The red LED remains off if no flight battery is connected.

CAUTION: it is essential to read the safety notes relating to LiPo batteries on page 10.
Attaching the propeller guard bars

The GALAXY VISITOR 2 is supplied with four guard bars whose purpose is to prevent damage to the rotors. We recommend that you install the guard bars to minimise damage caused by wall-strikes and crashes.

This is the procedure for installing the guard bars

Position the guard bars over the rotors, and fit them round the motors. Take care that the screw-holes line up correctly. Fix the guard bars to the case of the GALAXY VISITOR 2 using the screws supplied.







Visual checks

Before flying the model, check that there is no obvious damage to the case or rotors.

Checks after switching on

Switch the transmitter on. If the on-screen battery display flashes, and the transmitter emits an audible warning, replace the dry cells.

CAUTION: move the throttle stick to the bottom position (motors off), and switch the system on without touching the other sticks (Fig.1).

Open the model's battery compartment, and connect the flight battery (Fig. 2). Take care to maintain correct polarity.

CAUTION: do not touch the model for a period of three seconds, as it needs this time to complete the initialisation process. When initialisation is complete, fit the flight battery in the battery compartment and close the cover (Fig. 3).







Hold the model in your hand, and slowly open the throttle (stick forward): all the rotors should now start running at the same speed.

Now apply a roll, pitch-axis or yaw command, and the motors should respond by spinning at different speeds.

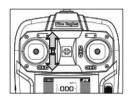
If you cautiously move the model to either side, or forward and back, the rotors should also respond by changing speed.

Return the throttle stick to Idle, then disconnect the flight battery from the model and switch the transmitter off. The check procedure is now complete.

Trim adjustments

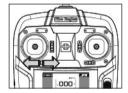
Throttle trim:

If the rotors start to spin without the throttle stick being touched, or do not respond to stick movements, you must adjust the throttle trim until they stop moving.



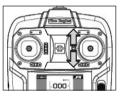
Yaw trim:

If the model's nose turns to right or left when it lifts off, adjust the yaw trim to correct the rotation until the model maintains a stable heading.



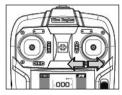
Pitch-axis trim:

If the model flies forward or back when it lifts off, adjust the pitch-axis trim until it hovers over one point.

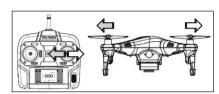


Roll trim:

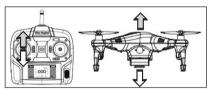
If the model moves bodily to left or right when it lifts off, adjust the roll trim until the model remains in a stable hover.



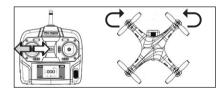
Basic information on flying the GALAXY VISITOR 2



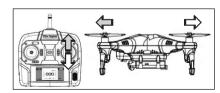
If you move the roll stick to right or left, the GALA-XY VISITOR 2 moves in the corresponding direction.



Move the throttle stick forward, and the GALAXY VISITOR 2 climbs. Pull it back, and the model descends.



Move the yaw stick to one side, and the GALA-XY VISITOR 2 rotates in the corresponding direction around the vertical axis.



If you move the pitch-axis stick forward or back, the **GALAXY VISITOR 2 flies** in the corresponding direction.

CAUTION: only the fourth illustration shows the model facing left. All the other pictures show the model's tail facing the observer. Please note that the direction of control response changes according to the model's flight attitude. For example, the pitch-axis and roll functions are reversed when the model is flying toward the pilot.

CAUTION: since magnetic field sensors are fitted to the model as well as the transmitter, the quadrocopter should not be operated in the vicinity of powerful magnetic fields, such as high-tension overhead cables or transformers. The model could crash if interference affects the magnetic sensors.

Practice flying

The flying field

The model should only ever be flown in a suitable environment such as an indoor-flying hall, devoid of obstacles. If you wish to fly the quadrocopter in the open air, please note that there should be no wind, and no trees, high-tension cables or other obstacles in the vicinity.

Practising with the model

Check the model and the radio control system, then switch the transmitter on, followed by the model.

Place the GALAXY VISITOR 2 on the ground about two metres in front of you, and check that its tail is facing you.

Cautiously advance the throttle stick until the model lifts off. Allow it to climb briskly to a height of about 0.5 metres, then attempt to keep it at this height and in this position. If the model is unstable, vibrates, or does not respond to control commands, reduce the throttle setting immediately and land the GALAXY VISITOR 2.

If you are a beginner, we recommend that you keep to a height of about 0.5 metres during the first few flights. Please do not fly lower than 0.3 metres, because the model will then be in ground-effect, which is caused by the downflow of air from the rotors. This effect makes it more difficult to fly the model smoothly. It is also important not to fly too high, as any unintended crash will then result in more serious damage.

Once you have learned the knack of taking off briskly, maintaining a given height, and landing softly, it is time to practise the roll, pitch-axis and yaw functions. During all these flights keep the

tail facing you at all times.

It is important to keep your model in one position at first; try to keep the model in the same position and attitude as after take-off.



CAUTION: land the model as soon as you notice that the flight battery is almost discharged: for example, when the GALAXY VISITOR 2 can no longer climb higher than 0.5 metres. Don't fly the model again until the flight battery has been recharged fully.

Remove the flight battery from the model immediately after landing, and switch the transmitter off.

If your model crashes after colliding with an obstacle, it is essential to check for damage caused by the impact.

Please don't leave the flight battery in the model when you are not actually flying it. Never discharge the battery completely, as deep-discharging can ruin it. If you do not intend to fly the model for a long period, it is best to remove the dry cells from the transmitter too.

Brake function

The GALAXY VISITOR 2 features an automatic brake function. If you abruptly release the roll / pitch-axis stick while the model is flying forward, its forward speed is automatically reduced. This function can be useful in avoiding collisions with obstacles.

Conventional flight mode and intelligent flight mode

Until now the direction of flight of radio-controlled models has always been clearly defined: 'forward' was always forward, and 'back' was always back. However, there is a disadvantage to this fixed direction of flight, as your brain has to switch 'sense' in particular circumstances; for example, when the model is flying towards you. In this case right or left commands at the transmitter still have to be made, but the model now moves in the opposite direction. Initially this "conventional flight mode" is difficult to master for the beginner. It is even more difficult to steer a quadrocopter in the correct direction, as it is harder to perceive which directions are forward, back, right and left on these machines. That is why we have integrated an "intelligent control mode" into the GALAXY VISITOR 2. When the model is operated in this control mode, 'forward' on the model is not necessarily 'forward' in terms of direction of flight. This means that the model always flies towards the pilot when he moves the pitch-axis stick back towards himself. It makes no difference which is the actual front of the quadrocopter.

CAUTION: when you operate the model in intelligent flight mode, the transmitter aerial should always face the model, as the mode works best in this situation.

Switching between the two flight modes

First switch the radio control transmitter on, then connect the receiver power supply to the GALAXY VISITOR 2. Hold the AUX 1 button pressed in for one second, then release it when the Status LED starts to flash slowly. In this way you can switch between the two flight modes at any time. If you are a beginner, we recommend that you only change the mode on the ground, rather than in flight, to avoid the danger of losing control of the model.

Conventional flight mode

The Status LED glows constantly red when the GALAXY VISI-TOR 2 is operated in conventional flight mode. In this mode "forward on the model" is always "the forward flight direction".

Intelligent flight mode

The Status LED flashes slowly red when the GALAXY VISITOR 2 is operated in intelligent flight mode. In this mode "forward on the model" is always the side which faces away from the transmitter.



CAUTION: when lifting off the transmitter aerial must always face the Status LED. If you neglect this, you may find that the control directions are not correct.

Switching the acceleration sensor on and off

Once you have learned the basic skill of flying the GALAXY VI-SITOR 2, you may wish to switch the acceleration sensors off in order to increase the model's agility. This is accomplished by pressing the AUX 2 knob on the transmitter: the Status LED flashes fast twice, then goes out for a second, flashes fast again twice, and then finally glows constantly. If you wish to switch the acceleration sensors on again in order to revert to more stable flying characteristics, press the AUX 2 knob again: the Status LED flashes briefly twice, then briefly twice again, and finally glows constantly.

CAUTION: the acceleration sensors are switched on by default when the GALAXY VISITOR 2 is supplied.

Tip: if you are not sure whether the acceleration sensor is switched on or off, you can tell by the Status LED of the GALAXY VISITOR 2.

"Auto-Return" function

What is the Auto-Return function?

The effect of the Auto-Return function is to cause the model to return to the pilot automatically and immediately, regardless of its attitude. Simply press the AUX 1 button on the transmitter to trigger the Auto-Return function. It makes no difference which flight mode is currently selected.

When is it sensible to use this function?

This function can be used whenever you are no longer able to perceive the GV 2's flight attitude; for example, if you fly the model too far away. When you press the AUX 1 button the red Status

LED flashes at a high rate, and the GV 2 immediately starts flying back to you.

Notes on using the Auto-Return function

When you are using this function, you should still use the throttle stick to maintain the model at a steady height. All the other controls must be left untouched while the Auto-Return function is in use. If you give another control command, the Auto-Return function ceases immediately.

The transmitter must continue to point at the model while the function is in use, and there should be no obstacles in the way. If the model flies past you, turn round and point the transmitter aerial at the GALAXY VISITOR 2 again. If not, the model will

The Auto-Return function should only be used indoors in a hall of adequate size.

How is the Auto-Return function stopped?

simply maintain its course.

Method 1:

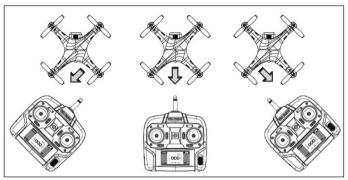
The Auto-Return function ceases immediately if you operate any of the controls other than throttle.

Method 2:

Briefly press the AUX 1 button a second time.

Flight directions while Auto-Return is in use

The model always flies towards the transmitter aerial when the Auto-Return function is in use. Please refer to the illustration below.



The direction of flight in Auto-Return mode changes if the position of the transmitter is altered.

Changing the direction of flight when the Auto-Return function is in use

While the model is in Auto-Return mode, you can alter the position of the transmitter to influence its direction of flight. For example, you can use this method to fly a circuit around you. This is accomplished by switching the GALAXY VISITOR 2 to Auto-Return mode, pointing the aerial at the machine, and turning round. Since the quadrocopter always tries to fly towards the aerial, the result is a circular flight path. You can also cause the model to fly to left or right by turning the transmitter in the opposite direction

to the desired direction of flight. For example, if you want the GALAXY VISITOR 2 to turn right, swivel the transmitter (and its aerial) to left, and vice versa.

NOTE: the Auto-Return function is available both in conventional and intelligent flight mode.

Binding the transmitter and receiver







Switch the transmitter on, set the throttle stick to the bottom position (Idle), and place it about 30 cm from the model.

Switch the model on by connecting the flight battery, and leave the model motionless. The red LED now flashes to indicate that the model is in Bind mode. The binding procedure is successful if the red LED glows constantly.

Binding is only necessary if you replace one of the radio control system components.



CAUTION: during the starting procedure the transmitter aerial must point towards the model's red LED. If you ignore this, you may encounter problems in flight when the intelligent flight mode or the Auto-Return function is used.

Calibrating the acceleration sensor

The acceleration sensor can be adjusted at the model's receiver. Normally the model is calibrated correctly at the factory, and is immediately ready to fly. However, if you notice fluctuations in its control response during a flight, you can re-calibrate the acceleration sensor in order to improve the flight handling.

Starting calibration mode

First switch the transmitter on, then place the model in a horizontal position and connect the flight battery. Hold the right-hand transmitter stick pressed in, then press the left-hand stick three times in sequence. You will hear a beep which indicates that you are in Calibration mode. Release the right-hand stick again.



Calibration

Move the throttle trim on the transmitter upward. The Status LED now flashes slowly, and the acceleration sensor is in calibration mode. This procedure is complete when the Status LED is flashing at a high rate.



Leaving calibration mode

Press the left-hand transmitter stick once. When you hear a further beep, you have left the mode, and can fly the model.



Note:

If calibration mode does not immediately start correctly, repeat the procedure until the Status LED flashes. Please be careful not to hold the right-hand stick pressed in for too long, otherwise you will enter Dual Rate set-up mode.

Dual-Rate function

The Dual-Rate function determines the GV 2's response to the pilot's control inputs. Briefly pressing in the right-hand stick selects one of the two points. The selected Dual Rate is indicated by the disc at bottom centre of the screen (see "Transmitter stick mode" on page 8). A solid disc at this point indicates the higher value; a half-full disc indicates the lower value. If you are a beginner, we recommend the lower value.

Adjusting the Dual-Rate values

The two Dual-Rate values can be set individually at the transmitter: please switch the transmitter on with the throttle stick at Idle. When it is switched on, push in the right-hand stick until the constant beep changes to an intermittent sound; please continue to hold the right-hand stick pressed in. When you hear the intermittent beep, you can set a value in the range

0 to 100. The higher the value, the faster the GV 2's response to the pilot's commands. The value you set is always the one corresponding to the disc on the screen. This means: when you see a half-disc in set-up mode, set the lower Dual-Rate value (recommended value: 40); when you see a full disc, enter the higher value (recommended value: 100). Once you have set your preferred value, release the right-hand stick: this action stores the set value. The procedure must be repeated for the second value.

Note:

Please do not move the left-hand stick forward until you hear the intermittent beep, otherwise the GV 2's motors will start to run. Do not set the values too low, otherwise you may no longer be able to control the GV 2.

Speed of the Auto-Return function

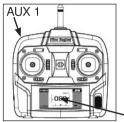
It is not essential to set up this function. However, if you do wish to adjust the Auto-Return function, please follow this procedure: Switch the radio control system on, and ensure that the yaw trim (below the left-hand stick) is at centre. The throttle stick must be at the Idle end-point. Hold the right-hand stick pressed in, and briefly press the left-hand stick three times. Now push the yaw trim (below the throttle stick) to the left to increase the speed at which the GV 2 carries out the Auto-Return function. The higher the speed, the faster the red Status LED on the GV 2 flashes. Press the left-hand stick to conclude the procedure. We recommend setting a high speed for outdoor use, and a low speed for indoor use.

Note:

If this mode does not start immediately, repeat the procedure until the Status LED flashes. Please note that the right-hand stick must not be held pressed in too long, otherwise you will enter set-up mode for the Dual-Rate values, and set the values to 0.

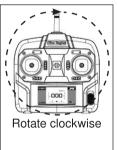
Calibrating the radio control system's magnet sensor

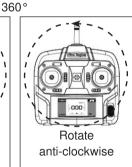
The GV 2's radio control system includes a magnet sensor which is responsible for the correct operation of the Auto-Return function and the intelligent flight mode. The calibration process should be carried out with a new model, or if you change the model's flight environment. Please follow the description of the calibration procedure below, and carry out the steps as accurately as possible. It is important that no objects which could cause interference - such as magnets or similar - are in the immediate vicinity, as these could affect the calibration process.



Locate the "AUX 1" knob on the transmitter and hold it pressed in while you switch the unit on. Release the knob when you hear an audible beep. The transmitter should now display the number 2 on the screen.

The screen displays the number 2.



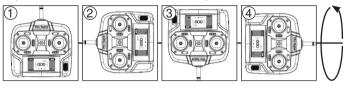


Lay the transmitter on a level surface (e.g. a table) and turn the transmitter first through 360 $^{\circ}$ clockwise, then through 360 $^{\circ}$ anticlockwise.

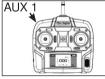
Tip:

Use the edge of the table as a guide for the rotation.

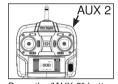
Now rotate the transmitter once completely around all four indicated axes, as shown below. It is essential to avoid pressing any of the knobs while you are turning it, as this makes it impossible to conclude the calibration procedure.



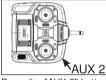
Place the transmitter on a level surface (e.g., a table) again. Set up a suitable reference line parallel to the bottom edge of the transmitter, e.g. the edge of the table, and carry out this procedure:



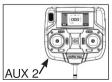
Press the "AUX 1" button once. The screen displays the number "0".



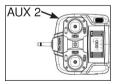
Press the "AUX 2" button once. The screen displays the number "90".



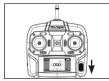
Press the "AUX 2" button once. The screen displays the number "180".



Press the "AUX 2" button once. The screen displays the number "270".

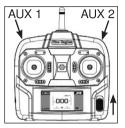


Press the "AUX 2" button once. The screen displays the number "0".



Switch the transmitter off to conclude calibration procedure.

Please follow this procedure to check the calibration of the magnet sensor:



Place the transmitter on a level surface (e.g. a table). Hold the "AUX 1" and "AUX 2" buttons pressed in simultaneously while you switch the transmitter on: you are now in magnet sensor test mode. Rotate the transmitter on the table until the screen displays "000". Set up a suitable reference line parallel to the bottom edge of the transmitter; a ruler is useful here. Now rotate the transmitter repeatedly through 90°, and check that the corresponding values (0°, 90°, 180° and 270°) appear at approximately the correct angle to the reference line. If you detect significant errors, you should repeat the calibration procedure.

Calibrating the transmitter sticks

Although it is not normally necessary, it is possible to adjust the travel of the transmitter sticks. Switch the transmitter on, and set all trims to centre (listen for the audible signal, or watch the screen). Now hold both sticks pressed in simultaneously, ideally by pressing the spherical base, until a dotted line appears on the screen. Repeatedly rotate both sticks simultaneously in a circular motion, keeping them at full travel (left-hand / right-hand stick to left / right). Now set the throttle stick to zero (Idle end-point), and

briefly move the bottom left-hand trim to the right to conclude the procedure. When you have finished, move the trim back to Centre.

Additional adjustment facilities

The GALAXY VISITOR 2 also has many other adjustment facilities. Please visit the product page for the model on our website at www.robbe.com where various set-up videos can be viewed.

After repairs

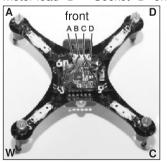
Checking the direction of motor rotation

If you have to carry out repairs to the model, all the directions of motor rotation must be checked (see illustration).



Motor sockets on the circuit board

Motor lead "A" = Socket "A" on the circuit board. Motor lead "B" = Socket "B" on the circuit board. Motor lead "C" = Socket "C" on the circuit board. Motor lead "D" = Socket "D" on the circuit board.



CAUTION: check that the motor leads are correctly connected after carrying out repairs.

Procedure for re-calibrating the pitch-axis and roll functions (in this example Mode 2):

- 1. Insert four AA-size dry cells in the transmitter, and switch it on.
- 2. Fit the fully-charged flight battery in the model, and connect it. Place the model on a horizontal surface, and do not move it until the calibration process is complete.
- 3. Use the right-hand stick to select the "Expanded control function" setting.
- 4. Use the left-hand stick to reduce the speed control to "0".
- 5. Hold the right-hand stick pressed in until you hear a constant warning tone. Continue to hold it pressed in.
- 6. Move the left-hand stick up until the set value is 50, then press the stick in.
- 7. Now release both sticks, and move the left-hand stick back to "0".
- 8. Press the right-hand stick once more until a constant warning tone sounds again; continue to hold the stick pressed in.
- 9. Now move the speed control to the forward end-point (value 100), and hold it pressed in.
- 10. Release the stick: the re-calibration of the pitch-axis and roll functions is complete. Check that the calibration process was successful before flying the model again.

(If you wish to re-calibrate in Mode 1, you must take the opposite stick assignment into account.)

Installing the optional camera set, NE252814



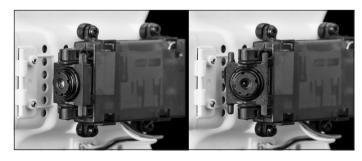


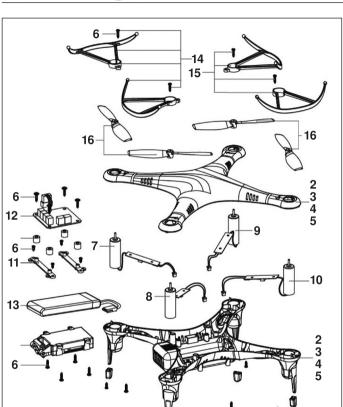


Attach the camera unit to the bottom of the case using the four screws supplied. Check that the camera lens faces forward.



Now connect the camera lead to the socket at bottom left of the **GALAXY VISITOR 2.**





Replacement Parts List - GALAXY VISITOR 2 RTF FTR

Order No.	Description
NE252801	Foot guard caps (4)
NE252802	White case
NE252803	Black / white case
NE252804	Black case
NE252805	Grey case
NE252806	Screw set
NE252808	Motor front right
NE252807	Motor front left
NE252810	Motor rear right
NE252809	Motor rear left
NE252811	Servo mount
NE252812	FTR receiver
NE252813	LiPo battery, 3.7 V / 350 mAh 25C
NE252815	Black protectors (4)
NE252816	White protectors (4)
NE252502	Main rotor blades
NE252122	USB battery charger, 5 V / 500 mA, Molex (not shown)
Optional accessories	
NE252814	Camera set
NE252513	SD / USB card reader
NE252514	SD card, 2 GB
	NE252801 NE252802 NE252803 NE252804 NE252805 NE252806 NE252808 NE252807 NE252810 NE252810 NE252811 NE252812 NE252813 NE252815 NE252816 NE252816 NE252502 NE252122 ional access

When replacing components it is very important to use the correct tool and to tighten the screws with great care.

Do not use thread-lock fluid!



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This symbol means that you should dispose of electrical and electronic equipment separately from the household waste when it reaches the end of its useful life. Take your unwanted equipment to your local council collection point or recycling centre. This requirement applies to member countries of the European Union as well as other non-European countries with a separate waste collection system.

Disposal of batteries

Batteries must not be discarded as domestic refuse. To protect the environment, always return exhausted or defective cells to your local recycling centre. These include retail sales outlets for batteries, and communal toxic waste disposal centres. Cover any bare wires with insulating tape in order to avoid short-circuits.



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